

THE NAVAL SAFETY CENTER'S AVIATION MAGAZINE

# approach

March 2000



Flameout in the Break

Over the Fence  
and Over the SAMs

How'd This Guy Get His Wings?

# approach

## The Naval Safety Center's Aviation Magazine

March 2000 Volume 45 No. 3

**On the Cover** Hornet drivers have fun! Self-portrait by Capt. John Leenhouts, USN

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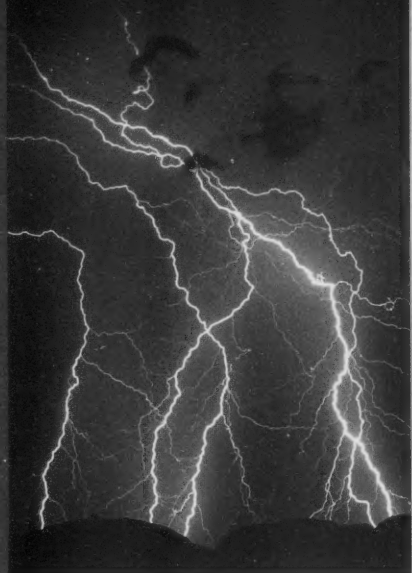
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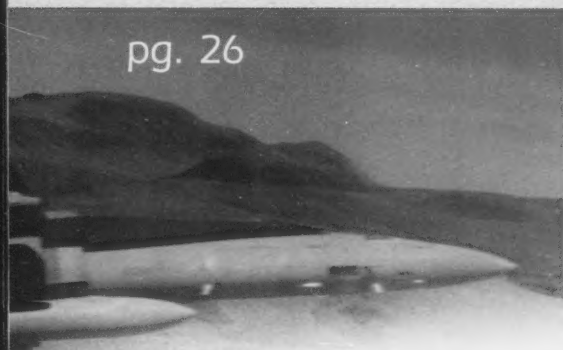
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# How'd This Guy

by Cdr. Andrew J. Barton

**B**ecause I'm the last person in this story still on active duty, it's up to me to tell this tale in the hope of preventing a mishap in one of your squadrons. Almost 10 years ago, I was a senior lieutenant in my first fleet P-3 squadron. I had spent six years in submarines before flight school, so although I was not a seasoned aviator, I was an experienced officer.

After my first deployment to Adak, my JO PPC was replaced with a new O-4 PPC with quite a few flight hours. The first indication that something was wrong with our new PPC was on a routine ASW training mission to the SOCAL operating area. On taxi for takeoff, the FE did a routine lights check and discovered that both prop pump 1 light bulbs on the No. 3 engine were out. The PPC elected to replace the bulbs before takeoff, and the flight station concurred.

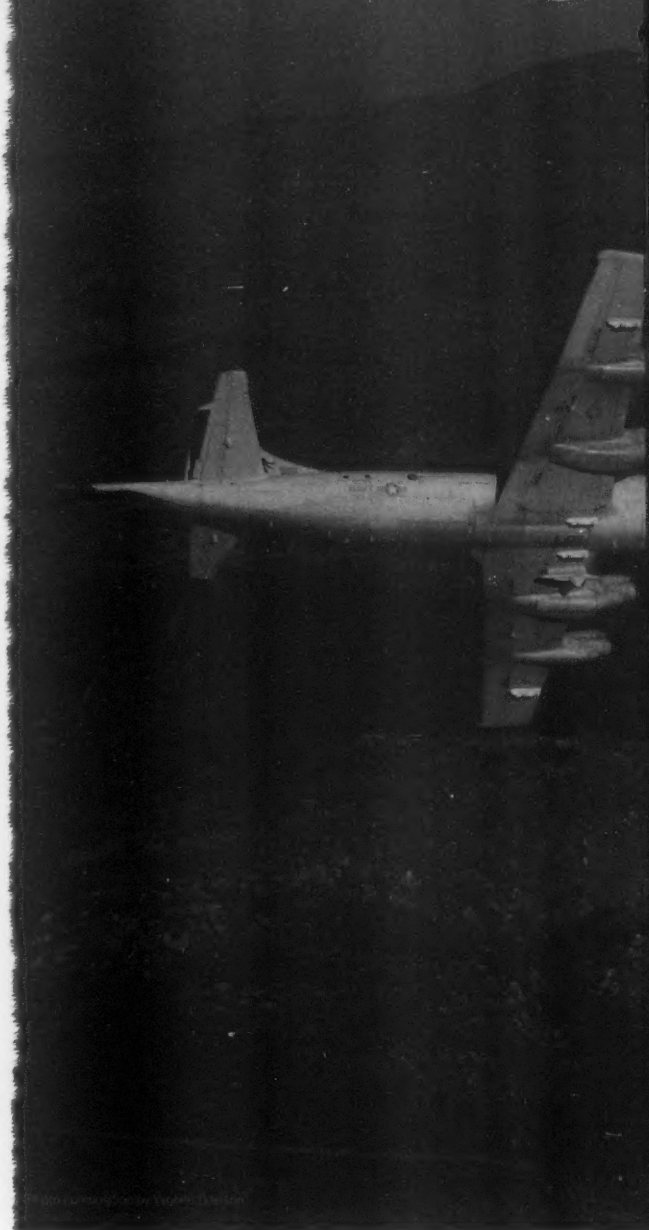
In an effort to take off on time, however, the PPC failed to ask tower for a delay. When we arrived at the hold-short, we were cleared for takeoff. The PPC rogered and told the 2P to continue onto the runway while he and the FE struggled to get the bulb back in the panel. The other cockpit crew all recommended that we hold to finish this maintenance before taking the runway. The PPC insisted we continue so we would not be late for takeoff.

That's when he first uttered the immortal words that would haunt the crew for the next year, "I'm the PPC, and I'm in charge." He ordered the 2P to take off, and while we rocketed down the runway, the PPC continued shoving the light bracket back into its socket.

From my seat on the radar cabinet, I knew this bizarre sight directly conflicted with everything I had been taught.

The flight down to SOCAL went fine—until about six hours into the mission. The PPC was still in the seat, having never taken a break. He had stayed in his seat so we would not have to climb above 1,000 feet for a seat swap.

Instead, he thought it would be safer to urinate in a Gatorade bottle while strapped in his seat. I made a mental note to talk about this technique with some of the instruc-





# Get His Wings?

All 11 of us were screaming at the PPC to get us out of there and climb on the emergency safe heading.

tors when we got back. The MO (a former FRS instructor pilot) agreed that the flight was out of the norm and said he'd talk to our PPC about his headwork.

A few weeks later, our crew was scheduled for a torpedo exercise on the Nanoose Range in British Columbia. This range is in the straits between Vancouver Island and mainland Canada. Very tall mountains surround the range, but you have enough room to maneuver safely if you are VMC.

We loaded our torps at Whidbey Island and were in the middle of our brief when the briefer told us the range

was clobbered: 300-foot ceilings and one half-mile visibility in fog. The wind was blowing hard and the sea state was so high that the launch-and-recovery crew

would not be able to recover the torps. Polar Tanker, the range conductor, told the PPC that he was going to scrub the mission.

Again, our fearless PPC decided to launch anyway so as not to affect our qualification progress or have to repeat the flight to get the "X." The 2P and I both insisted that going to the range was foolish in this weather and recommended aborting. He placated us with, "Let's just take a look. If it's IMC, we'll return, but it won't hurt to look." So off we went.

Fifteen minutes later, we were holding IMC in Vancouver's ILS corridor, looking for a VMC hole to descend to the range. The PPC announced, "I see a hole. Chop VFR now." He rolled the aircraft into a 45-degree bank and chopped the power. The 2P said, "This is not VFR, and I'm not going to cancel. Are you nuts?" The PPC again uttered those immortal words, "I'm the PPC, I'm the mission commander. Chop VFR now!"

We descended IMC, passed through 1,000 feet AGL at 3,000 fpm, 45 degrees AOB, and rolled out at 300 feet, just under the ceiling with one-half-mile visibility—just as a floatplane flew by our nose. We were forced to maintain a 30-degree AOB turn to avoid flying over terrain and stay in the half-mile VFR hole the PPC had found.

We couldn't raise Polar Tanker because he had gone home (no surprise to the rest of us). No joy with Vancouver Radio or approach to get an IFR clearance out of our dilemma. No answers on any frequencies or guard because we were low and surrounded by invisible mountains. MOSA (minimum operational safe altitude) was totally busted. The radar operator was giving constant terrain calls and screaming for a climb. All flight-station personnel were yelling at the PPC to get us out of there and climb.

To make matters worse, our VFR hole was drifting toward vacation homes built on a cliff 100 to 150 feet off

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# Our Futenma *Fun Flight*

by Capt. J.D. Osborne

**T**he 2nd MAW recently revised its Operational Risk Management Order. This order was written as a model to be adapted by the rest of the Marine Corps. Many Marine aviators are still undecided about whether it applies. Some view it as a better way to conduct business and save irreplaceable assets. Others think it will be another Marine Corps order written for the express purpose of impaling promising careers. If ORM had been around a few years ago, two motivated senior aviators in my squadron would never have been allowed to launch.

"Lastly, don't let your HAC kill you, and believe me, he will try." Thus, ended the instrument ground school part of flight school at NAS Whiting Field. Although I was a young, hard-charging Marine, confronting my own mortality was sobering. The realities of naval aviation were only a passing thought as I was still a few months away from receiving my wings of gold. I finished flight school and soon found myself in Okinawa in the advanced party of a CH-46E squadron starting a UDP. The thought of another Marine "trying" to kill me never entered my mind until I flew a cross-country from MCAS Futenma to Camp Humphries AAF in the Republic of Korea.

Following the turnover of aircraft between squadrons, I immediately completed three day-VFR flights, the first since being designated as an H-46 pilot. During the afternoon of my third flight, the next day's schedule came out. I would be the copilot of the second aircraft in a section flying to Korea.

Flight planning was routine: "Hey, new guy, get the other copilot, and find and prepare the maps for tomorrow's flight."

The other copilot and I went to work ensuring all of the maps, navigation and fuel calculations were correct. The first leg would take us from "Fun-Tenma" to Kanoya, approximately 400 miles over open ocean. The second leg would take us to Pusan, and a final short leg would complete the cross-country to Camp Humphries. The entire trip was 875 miles—seven and a half hours of flight time.

Once we computed the brief time, fuel stops and inevitable delays, we figured we would be pushing the limits of our crew day. We finished all of the preparations by 2230. The brief was scheduled at 0500 the next morning. It was a good thing the section leader didn't wait till the last minute to give us our instructions.

The brief began on time. The XO told us we had to reach our destination. The squadron was part of a Special Purpose MAGTF participating in a joint exercise.

"We are the new guys on the block," he said. "I want to make a good first impression and let MAG Thirty-Six know they can count on us. We have to get there first." Then we covered all of the normal things, including a check of the weather and the fuel configuration. We did not have a "Bullfrog" (an H-46 with extended range). To complete our first leg, we would have to carry two internal tanks.

A final check of weather revealed a stationary front was sitting over the southern tip of Japan, running north all the way up the Korean peninsula into China. Each of our designated landing areas were calling 500-foot ceilings and one mile visibility. This report made me a little apprehensive, because this would be the first time I would fly over an open ocean. The only time I had flown over water was when I completed my initial CQs aboard the IX-514 in Pensacola Bay.

After the brief, we went below to sign for the aircraft. The aircraft discrepancy book had a pink slip on a broken TACAN. Well, the CH-46E only has one navigational aid, and I was about to fly 400 miles over open ocean with only a compass. I asked my HAC, "Shouldn't this be a downing gripe?"

Immediately, the AMO piped up with a smirk and a nervous twitch of his hand, "You're Dash Two in a section. You don't need a TACAN. Quit being a girlie!"

I answered, "What if we get separated?"

"Ah-h, keep your eyes open and your mouth shut." Of course, these responses drew a loud roar of approval from his subordinates and a cackle from him.

I walked out of maintenance, shaking my head muttering, "Only one hundred and seventy-eight and a wakeup."

My little adventure to Korea was looking bad and not getting any better. While I was preflighting the inside of the aircraft, I heard the HAC walking on the top. Suddenly, I heard the unmistakable metallic pings of coins hitting aluminum. It sounded like someone just emptied their piggy bank in the engine compartment. I stuck my head out of the door only to see the clamshells open and the HAC bent over peering down the vert shaft holding a handful of change.

I asked, "Do you think we should get QA to doublecheck that compartment?"

"No," he replied, "I have a good idea where I dropped them." With that comment, I strapped in, realizing where mishap statistics originate.

Our section of aircraft took off at 0700 and headed north. The weather began to

deteriorate. Sure enough, by the time we reached Kanoya, the weather was as forecast. Finding the field was a little tricky but I kept my eyes open and mouth shut.

We shut down upon landing and made our way into base ops to get a better picture of the weather. The next leg would take us from Kanoya to Pusan, which was only about 220 miles. To save money, we filled only one of the two internals, giving us three hours of fuel. We

***A final check of weather revealed a stationary front was sitting over the southern tip of Japan, running north all the way up the Korean peninsula into China.***

launched an hour later and cautiously proceeded north at 80 knots. Eventually, we made it to the Korean Strait and the farther we went, the worse the weather got.

At one point we inadvertently went IMC at 150 feet. I had the controls and tightened up the formation. So, there I was at 100 feet, 40 knots, my only visual reference the red strobe light on the aft vert shaft and the white peanut light on the tail. The only reason I did not get vertigo was because the HAC continually repeated, "You're level, one hundred feet, forty knots."

My mind wandered back to my IFR class in flight school. How I wished I was back that day. No, I wished I was on Okinawa. No, I wished I had a TACAN. No, I wished I had told the AMO to stick it!

Just about the time we were debating to call "popeye," we broke out of the goo. We were bearing down on an oil tanker about a quarter mile ahead. The flight immediately broke left to avoid the ship, and I saw a crewman at eye level waving at us. Again my mind raced back to Whiting Field. By this time, we had been flying more than two hours, and we still had another 30 minutes to go. We had burned a lot more gas than planned because of



our slower speed. I had no idea how much farther we had to go.

We eventually made it to the peninsula and began to orbit a mile offshore. We were down to 300 pounds and ready to put the aircraft on the ground. Why were we orbiting? The lead called, "Do you guys know where the airport is? ... I have the TACAN tuned, but the field isn't there." I felt like saying, "You know, if I had nerve and some more gas I could help, but right now, I am preoccupied, looking for a place to land in the city."

Apparently, Pusan has two TACANs, one on the east coast; the other is at the field 15 miles away. Luckily, I saw a 747 on final approach. We took the lead for the first time that day and followed the heavy aircraft into Chime Airport. We shut down with just under 200 pounds a side, NATOPS minimum.

I was glad to be on the ground and thought we were done for the day. The two HACs went into base ops to get fuel and check the weather. The other copilot and I began comparing notes and concluded we had to find a place to stay in Pusan. No way would we push our luck.

Just then, a Blackhawk taxied up and shut down right next to us. Our HACs walked out and said, "OK, the trucks are on the way." My anxiety was building, as I could not believe we were going to continue. As the junior aviator, I didn't think it was my place to confront the senior aviators. But the H-60 pilots walked by, and a conversation ensued. They had flown down from Seoul and said they tried to fly VFR until they missed a wire by a couple hundred feet. Then they had immediately climbed through the goo, contacted center and flew IFR the rest of the way. They concluded, "Korea is a dangerous place. The combination of hills, power lines and bad weather will kill you. You won't catch us doing that today."

To paraphrase what those Army guys said: "If you try to fly VFR, you are stupid." But my senior aviators apparently had a case of "get-deployed-itis." The section leader turned around and said, "Let's go. It's getting late."

My mind went into overdrive. What if we go IFR? Where do we go? How will we navigate? What about crew day? What about the weather? What about the wires? This guy is trying to kill us. I said, "What are you trying to do, kill me?"

Common sense shocked them into reality. We talked to the H-60 pilots and got a place to stay on a small Army base in Pusan. That night I wondered if these guys had forgotten everything they had learned in flight school. I then wondered if the next day would be easier. If ORM had been around six years ago, despite the "seasoned judgment" of the senior aviators, there is absolutely no way this flight would have been allowed to leave Futenma.

According to the risk-assessment worksheets incorporated into the ORM Order, the following factor would have characterized this flight as a high-risk mission: Aircraft Status: Partial Mission Capable.

These factors would have characterized this flight as a medium-risk mission. Flight duration: More than 4 hours. Instrument meteorological conditions: Weather less than 500 and 1. Crew day: Greater than 10 hours.

These factors taken one at a time are easily handled. However, as a group, they can be overwhelming. What kind of control measures could have been instituted to negate these risks? I can think of many. The easiest would have been to wait an extra day in Okinawa before departing. If that would have been done, I am sure the TACAN would have been fixed, and the weather would have improved. The next time you are in a position to push the comfort zone a little, consider just how much of the zone already has been pushed.

Capt. Osborne is the NATOPS Officer for 4th MAW.





by LCdr. Patrick Grady

**T**his is not the stereotypical tale involving super-human aviation skills and derring-do. And it's not a story that begins with "There I was flying inverted, in the goo, at night, a hundred miles from homeplate, out of gas, and out of ideas." It is a story of how we aborted a training flight at night because too many little things were just not quite right.

I was scheduled for a tactics flight. We were supposed to go feet wet and work the mission systems. It was the squadron operations officer's dream: lots of night time, during which we'd complete copious amounts of tactical qualifications.

We determined early that the weather was a factor. Ceiling and visibility fluctuated from 1,000/2 to 700/1. With weather dropping below basic VFR and no special VFR procedures for night flight, we had to change the mission. Our new mission was basic airways navigation.

We intended to file and fly a round-robin with a brief stop for approaches at Yokota AB and GCAs at Atsugi. Once again, the weather foiled our plans. To file, we required an alternate. With 700/1 over the Kanto Plain, we had no legal alternate. So, we waited.

The weather improved. The ceiling lifted somewhat and the visibility increased. We could file a route but we had lost time and opted to stay in the local GCA pattern. We told the SDO of our intentions, read the aircraft discrepancy book and preflighted. Everything went well until we tried to turn on some lights. The lower console lights didn't work. In all of my years of flying the SH-60B, I had never

heard of a crew downing an aircraft because some of the interior lights did not work.

For a brief moment, I wondered why this was a big deal. We were staying in the pattern. Then common sense hit me like a freight train, and I decided that I was entitled to some lower console lighting. We returned the aircraft to maintenance and waited until repairs were complete.

It was quality flight time in the GCA pattern. We were in and out of the clouds and in between the cloud layers. We were logging both night time and that coveted actual instrument time. Add the communication challenge of talking with the foreign controllers and it was quite the workout. But my copilot and I were both on glide slope, on glide path. I was having one of those flights that reinforced the notion that flying and being a naval aviator were righteous things. Then, I dropped my pen.



It bounced under my seat. I twisted left, then wiggled right, but I couldn't find it. My crewman came up the tunnel to see if he could locate it. He, too, was unsuccessful. While my crewman and I were preoccupied with searching for my pen, I suddenly remembered where I was—in a helicopter, in the GCA pattern, at night, in the goo. I had lost my situational awareness and had allowed my copilot to fly solo.

Continued on page 33

# Four-Ship to Disaster

by Capt. Jason Schuette

I wondered for a long time if this story would be worthy of *Approach*. The lesson is simple, but this near-miss happened more than once and could happen again. More importantly, after more than two years in the fleet, this incident left me the most frightened I have ever been, including tanking from KC-135s at night in IMC.

We were returning as a four-ship from a Yuma det. I was dash last. The first half of the flight was uneventful, given the fact that we were tanking off of a KC-10 and the weather was clear. Our goal was to be overhead Cherry Point during daylight to fly the division into the break.

About an hour out of Cherry Point, Dash 2 developed oil-pressure problems, which made them a bit nervous. However, they decided to press as the engine was staying within limits at the proper rpm.


Although we had launched on time, the winds along the way were not favorable, hard to believe heading east. Consequently, it would be a bit darker than we had anticipated. Also, although the forecast weather into Cherry Point was VMC, as we got closer, it appeared we would have to penetrate some thick cloud cover to reach VMC. ATIS was calling the field clear. Although I didn't say anything, I assumed we were going to press for the overhead.

This was where the fun began. It was getting dark, and I figured that, as a division, we would have to make an IMC penetration to VMC, with a weak jet in the formation.

While we were above the clouds VMC, I wondered, why not get separate clearances? Although not as cool, it would make life easier, not to mention safer.

As predicted, once we started to descend, the weather became a signifi-

Photo continues to by Alan Amen



cant factor. We spent what seemed an eternity in the clouds as approach vectored us around at 11,000 feet. We were balanced, which put me on the left side of the formation, not the favored position of Prowler pilots. Then my section lead's lights began to fade; I figured the clouds were thickening.

As I moved closer, trying to keep sight, I realized it wasn't thicker clouds but ice on my front windscreen! To improve my visibility, I started moving up and closer to keep my lead on the clear canopy, but at that moment, the division turned into me. All I remember is staring at a whole lot of airplane and wondering what metal on metal would sound like. Fortunately, I didn't find out.

As mentioned earlier, the division was fishing around at 11,000 feet. The clouds were reported scattered at 9,000 feet and below, yet not once did the lead try to get us into the clear. He did begin to see the futility of the situation and decided to split up the formation to land as individuals, first getting rid of our lame bird and then peeling the rest of us off,

still in the goo. After that, the flight was uneventful except for my vertigo, which eventually dissipated.

So what did I learn from that little experience? First, at many points leading up to my scariest moment, a link in the chain could have been broken. Anyone, myself included, could have recommended splitting up the flight. I could have called lost sight and made a play for the clear air below. Either way, I think it would have improved my situation.

Second, because we perceived that our lead didn't appreciate constructive debriefings, we never did one, which is another reason why I'm writing this story. This wasn't the first time I had flown into IMC conditions in a division. Without a debrief to consider all points of view, we didn't discuss the learning points, and this situation could happen again.

OPNAVINST 3710 doesn't prohibit flying divisions into IMC conditions; however, I don't know of any lead who would do such a thing unless it was critical to flying the mission.

Capt. Schuette flies with VMAQ-4.



by Lt. Joel Becker

I was flying a mid-stage bounce, solo, with 18.2 hours in the T-45, when things fell apart.

"Attitude. Attitude! Trap, trap, trap," yelled my LSO as I jammed forward into the straps.

"Shut it down," he directed.

Having just lived the most exciting two minutes of my naval aviation career, many thoughts raced through my head as I watched the crowd of crash vehicles racing down the runway to meet me.

"Now I've done it," I muttered. "I'm never going to see those wings of gold now!"

Shaking a little bit, I slowly made my way out of the jet and saw my LSO approaching.

"What happened up there?" he asked.

I debriefed him as the crash truck gave me the "presidential" ride directly to the SDO's desk. The SDO walked me over to the computer, had me sit down, still in my flight gear, and start writing while everything was still fresh in my mind.

Here's part of my report.

We (our FCLP class of six students) had just departed and were in the process of reentering for the break. I was number two inbound for the carrier break on 13L with 300 knots, 800 feet. Echo 1, in front of me, did not break and had just called to say he was going around.

Echo 6 was just taking off and cleaning up to start his depart and reenter. Not far behind me, Echo 3, Echo 4, and Echo 5 were at 1,500 feet setting up for their breaks. I called the initial, thinking it was going to be a traffic mess in front of me.

Paddles told us to break at the numbers, which I interpreted as don't get down to the upwind end of the runway with the traffic mess. Never having hit the break at 300 knots at the numbers, I knew I had to put some G on the jet if I was ever going to get down and on speed for a good first pass.

The adrenaline started pumping and as fast as I ever had, I whipped the throttle back and threw out the boards and heard, "click."

# Flameout in the Break





"Did I hit the detent (flight idle stop)?" I wondered. Then I went right to the engine gauges, which showed I had flamed out.

Not knowing whether I could dead-stick it to the deck, I decided to make a right turn to the east where I wouldn't hit anything on the ground in case I didn't get the immediate airstart.

As I turned, I called, "Mayday," on paddle's frequency and cleaned up. With about 250 knots and 800 feet, I started to trade airspeed for altitude, but knew I couldn't get too high because my classmates were in the depart-and-reenter area at 1,500 feet. At about 1,000 to 1,200 feet and 230 knots, I decided to go for the immediate airstart, which worked. Waiting for the engine to spool up, I stayed around 1,200 feet and started to slowly turn to the southeast. I wanted to stay away from the people in the break heading for the initial.

By now, tower was calling out for the person turning right off the break, and I realized that my Mayday call must have gotten stepped on. I told paddles and tower about my flameout and relight, and they had the rest of the FCLPs delta. Paddles told me to make a precautionary approach and take the trap.

I started an easy left turn, northwest, and checked my engine instruments. I reset my generator and watched—the engine seemed to be working fine. I could see jets at different delta altitudes, so I stayed low (600 feet) and close to the field. Paddles was having a hard time picking me out, so I called the

numbers at 17, and then made a left turn to parallel 13.

Tower cleared me for the left low key, but I still had two jets overhead at around 1,500 and 3,000 feet. Tower directed them to climb, and once they were out of the way, I made a left turn for low key, and performed a PA for an arrested landing.

A month later at a safety stand-down, everyone had a good laugh at my story, but important information wasn't put out that I think could benefit others if they find themselves in the same situation.

The T-45 NATOPS (15.2, Airstart Procedures) says, "Engine flameout indications generally consist of falling RPM and EGT with corresponding reduction of thrust." You get these same indications every time you break, but if you've lost your engine, you'll eventually get associated master caution and warning lights. Unfortunately, by the time these lights clue you that you're a glider, you've probably bled off all of your airspeed. Your only option will be to eject because you'll be decelerating rapidly through 180 knots.

NATOPS says with an engine failure below 1,500 feet AGL and airspeed below 180 knots, you should eject. So, what told me I had lost my engine? The fuel-flow gauge and muscle memory.

My hand went too far back with the throttle, bypassing the flight-idle stop. I quickly checked my instruments: one second, RPM coming down, two seconds, EGT coming down, three seconds, zero fuel flow. The fuel-flow gauge is co-located with the RPM and EGT gauges. Use it! In my opinion, it's the quickest way to determine if you've lost your engine. If you haven't bled off too much airspeed, go for the immediate airstart.

Not only did the fuel-flow gauge save the day in the break, but also it came in handy two weeks later on a cross-country trip. We were descending through 35,000 feet over Asheville, N.C., when the same jet flamed out again! But that's another article. ✈

Lt. Becker flies with VRC-40.



Ted Carlson

# Over the Fence and

by Lt. David Culpepper

... a week into the war in Kosovo, we launched on a day, double-cycle, Airborne Forward Air Control (FAC [A]) mission. We checked in with AWACS, and then flew to one of many active tanker tracks to top off before going in-country.

Coming off the tanker, my wingman experienced one of those little nagging problems. Nothing major, but enough to decide it was not wise to go into hostile territory. I kissed him off to make the next recovery. I decided I would at least proceed to the marshal point, check in with the E-2, and see if I could be any use. After all, I still had ordnance.

The E-2 controller told me that I was in luck. Our sister squadron had apparently experienced the same type of problem and their FAC (A) was also a single looking for a friend. I checked in with Tiger 21, and we coordinated an altitude to rendezvous.

I headed to the marshal point and began an orbit while trying to find Tiger 21. Now, in hindsight, I realize he never actually said to meet him at the marshal point. That was an assumption I made because, being over friendly territory, it was the only thing that made sense.

After several minutes, I 'fessed up on the radio that I couldn't find him. Tiger told me his location with a latitude and longitude. I didn't have to look at my chart to know that he was "over the fence," but I was still surprised when I plotted it and found he was orbiting an active SAM ring. I made a beeline to his reported position to join up.

In the interim, Tiger 21 had been trying to identify activity on the ground. Just before I

arrived, he found a hostile force and started dropping ordnance. By the time I got there, he had delivered both his bombs and neither had fused. Tiger then began to give us a talk-on to the target before we were joined up. We had made one lap around the target when my RHAW gear lit up like I had never seen.

I leveled my wings and looked toward the spike. I spotted a long plume rising out of the SAM area, coming in my direction. My heart jumped into my throat.



I swallowed hard and called my spike with the best bullseye call I could muster to get the F-16CJs pointed in the right direction.

I began to jink while my RIO expended countermeasures. The SAM's booster had now burned out, which made it tough to see. Shortly thereafter, we dropped our spike only to hear Tiger 21 had picked it up. It wasn't over, but I did breathe a sigh of relief. At least I didn't have to outrun the bear anymore. I maneuvered to a cover position for Tiger 21 while I tried to see the missile again. No joy.

Tiger was doing his best defense now and soon dropped his spike. Thanks Grumman, for EA-6Bs.


We hightailed it out of there. We were out of time anyway, but I just wanted to get back

# and Over the SAMs!


to the boat. We hit the tanker one more time and recovered without incident.

Every day we fly, we make choices. Often, those choices involve go-no-go decisions. We look at whatever problem we have and consider all the possibilities.

if we just get out of this one, we will never make such a stupid decision ever again.

Some requirements are not flexible, and for good reason. We would never take an airplane flying with one hydraulic system failed, with an engine out, or without a navigation platform at night or in IMC. And we all know the smallest combat-fighter element is the section. 

Lt. Culpepper flies with VF-14.



Our "what-if"

logic may go something like this: 1) The number 2 generator is not working. 2) I have two generators. 3) The entire flight will be flown in daylight. 4) The current weather is beautiful VMC and is forecast to remain the same. 5) If the number 1 generator fails, I still have the emergency generator. 6) If the emergency generator fails, I'll be NORDO, but the plane won't fall out of the sky. I'll just join my wingman and come home. Conclusion: I take the airplane flying.

You can see how this logic can push things farther than necessary. We may find ourselves airborne and realize that the risk we took was not worth the gain. Or worse, our backup plan may disappear, and the failure may follow a path we never anticipated. Now painted into a corner, we will swear on a stack of bibles that

I swallowed hard  
and called my  
spike with the  
best bullseye call I  
could muster to  
get the F-16CJs  
pointed in the  
right direction.

Photo by LCDr. Tom Prechilo

# What a Great Show! They A

by Capt. Chris Andersen, USNR

A irshow on dependents' day cruise. Showing off a small slice of what we have trained so long to do. This would be the second time our air wing would put on the show that I had written and sweated over, and that I would once again direct from the Boss's chair.

The first demonstration—for a bunch of visiting foreign military types a few months before—had gone off without any problems, so we believed the second time would be even better (though OPTAR constraints meant no rehearsal this time). The aircraft would be coming off the beach, as we would be in port at Norfolk between at-sea periods during workups. Ten days before pulling in, we briefed the show, stipulating the attendees had to be the players, no substitutions.

The show's time line allowed the aircraft demonstrations to push from four holding points, arriving at the show's center at various intervals. Push times and inbound speeds were organized much like a Case III recovery, giving enough time for the preceding aircraft to vacate the show center and for any shrapnel from the live ordnance demonstrations to clear.

Glitch number 1: It was June and the mid-Atlantic haze was a factor. Visibility was down to no more than 3-to-4 miles and that was stretching it. The captain and I (neither CAG or DCAG was aboard that day) talked it over on the bridge 30 minutes before show time. We were sure we could fly the demonstration safely because the aircrews were very experienced.

All the aircraft checked in at their stations and received the time hack to synchronize the show. Five minutes before the show started, an SH-3 came out of starboard delta to drop a

line of smokes one mile off the port side of the ship. Halfway through that event, a Tomcat pushed to make a supersonic pass to start us off. The crew reported that the visibility was so poor they couldn't see the ship.

Glitch number 2: The SH-3 crew had trouble getting the smokes out of the aircraft. They had five minutes to complete the drop and clear center stage before the Tomcat arrived, and they weren't going to make it.

Despite a couple of calls from me, the SH-3 lingered on the smoke line, trying in vain to dispense every last canister. No problem, I thought, just keep the helo out at a mile and let the Tomcat complete the pass between the ship and the helo. Meanwhile, the act following the Tomcat had just called to tell me they were pushing on time. An A-6 was inbound with a full load of Mk-82 Snakeyes to be delivered at the top of a pop-up starting from the starboard side of the ship, with the weapons hitting beyond the smoke line on the port side.

The Tomcat used his TACAN needle to get close enough to finally pick up the ship inside 3 miles. The pass and the boom that quickly followed were impressive, despite the haze and the fact that he never saw the SH-3.

Glitch number 2 continued. The SH-3 crew was still trying to dispense the last of their smokes as I became increasingly concerned.

My next call to the helo was, "Put the ship on your nose and get to starboard D now!"

In the next few moments, the SH-3 turned toward the ship, just as the A-6 called, "In the pop." Big problem! The next few seconds were surreal. The helo had barely covered half the distance between the smoke line and the ship. The Intruder pickled his load of



# Almost Took Out That Helo!

Snakeyes, and the bombs headed for the water. The Mk-82s began exploding, and I held my breath at the sight of the SH-3 silhouetted against the explosions, a half-mile past the aircraft.

The shock waves of each detonating bomb pounded the tower's glass. The explosions finally ceased, and the helo was still in the air. For the blissfully ignorant family members and friends watching, it appeared as though we'd planned that way. About 15 seconds later, the captain blew into the tower, looked at me and the show narrator, and asked, "Wasn't that a little close?"

I agreed, saying it had certainly gotten my attention. He quickly exited, and, in retrospect, I'd have done the same thing. We completed the show without further incident, and all ended well that day—or so I thought.

Two days later, it became clear just how close we had come to tragedy. A piece of shrapnel had nicked the root end of one of the H-3's blades. The nick had gone unnoticed through the SH-3's next two flights and was finally discovered on a turnaround inspection en route to NAS Mayport. The entire blade assembly had to be replaced. One-quarter inch in almost any direction and the results would



*The Mk-82s began exploding, and I held my breath at the sight of the SH-3 silhouetted against the explosions, a half-mile past the aircraft.*

Photo by PHAN Sean D. Flynn  
Photo-composite by Patricia Eaton

have been catastrophic. After 11 years, the thought of what might have been still makes me queasy.

A good friend of mine, who was the CAG ops officer, was tasked with the investigation. It wasn't too hard to find the causes of the mishap. The deafening silence of my voice on the tower frequency that could have prevented the release of the Intruder's load of Snakeyes still stands at the top of my list of failures, the last link in the chain of events before any mishap. There were contributing causes as well, and I'm sure you can name a couple. The only one that is not evident and was not known until the completion of the investigation is that the helo crew who briefed for the show was not the crew who flew the hop.

This little tale of mistakes is worth reviewing from an ORM perspective. I think of

*We completed the show without further incident, and all ended well that day—or so I thought.*

managing risk as "minimizing untimely failure." Most of our responses to untimely failure come after the fact.

Before and during the show, people in the chain of command made decisions that set the stage for what happened. Let's explore them, not to assign blame, but to understand that as any plan unfolds, each phase can introduce elements that help lead to failure. Managing those elements while keeping sight of the finished product is the goal. There may be times when the goal is not worth the risk.

Why did we have only a show director and a narrator in the tower—one with his head down reading a script, and the other tasked with both running the show and keeping an eye


out for hazards? This shortcoming got by everybody in the planning process, and there were a lot of senior officers who were part of the planning and approval process.

An unbriefed crew participating in the show was just one of the critical failures. The helo crew would have followed the script if they had been at the brief.

Not rehearsing because of OPTAR constraints is hard to evaluate. If everyone had complied with the airshow instruction, the mishap wouldn't have happened. But the challenge of demonstrating various aspects of power projection at low altitude over water with limited visibility required an increased level of performance from all participants. Did anyone suggest drastically scaling back or even canceling demonstrations, given the lack of money for rehearsal?

There was no positive clearance before each weapons-release demonstration to ensure the impact area was clear. The clearance for a green range was passed at the beginning of the show. In retrospect, every act that was to release anything should have obtained a unique clearance. This is another hazard that got by everyone in the planning process.

Should the captain have stopped the show? Another tough call. He'd been concerned enough to come up to the tower. He was familiar with the show. From a risk-management perspective, where the importance of preserving and protecting assets had just been compromised, would pulling the plug and sending the aircraft back to the beach have been a prudent decision?

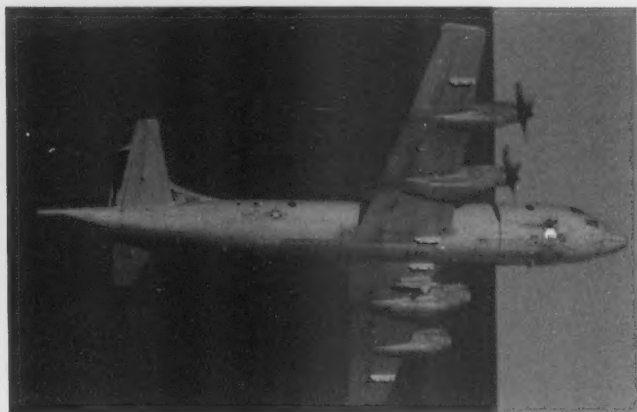
Repeating mistakes seems to be characteristic of all human endeavors. ORM is about learning to examine critically the operational planning and execution processes, remembering that despite our best intentions, the law of unintended consequences will always apply at some point. 

Capt. Andersen flew F-14s and is now a member of the Naval Safety Center's Naval Reserve Unit 0186.









the water. Do the math: an aircraft at 300 feet AGL flying over 50-foot-high homes on a 150-foot cliff. We were flying about 100 feet over the roofs of these homes as we constantly turned in our VFR hole.

The PPC had his hands full keeping the plane VMC and out of the water and couldn't make any decisions. The entire crew (except Sensor 3, who was sweating bullets making MOSA calls) was in the flight station. All 11 of us were screaming at the PPC to get us out of there and climb on the emergency safe heading. The 2P finally took the controls and began an immediate climb.

When we regained radio contact, we were at 8,000 feet, right in the middle of Vancouver International's approach corridor. Vancouver Approach was not happy but vectored us home.

I fully expected a flight violation, but nothing ever came of it. When we got back on deck, several crew members immediately beat feet to the skipper's office to relate our story and ask to be removed from the crew so that they never had to fly with our 0-4 PPC again. The 2P, TACCO and I also talked to the CO and explained what had happened. He said that he would talk to the PPC about this incident. But as far as we could determine, nothing changed.

Our fearless PPC deployed with us and managed to fly some of the most poorly conducted missions in VP history. A few highlights include:


- Overriding a waveoff call from the 2P and FE, touching down at the 5-board on an 11,500-foot runway, and stopping the aircraft just a few feet short of the grass.
- Ignoring the battle-group operations officer's orders to clear a warning area and RTB, and flying into the middle of a South Korean live-fire exercise.
- Listening to three radios at the same time and ignoring his crew for 90 minutes during a three-submarine ASW exercise.

- Flying into a typhoon to search for a Soviet Foxtrot submarine transiting on the surface to Vietnam. I tried in vain to convince our PPC that no submarine skipper in the world would be on the surface during a typhoon. The next day, on my first mission-commander flight, I found the Foxtrot 250 miles south of his search pattern, underway to Cam Rahn Bay in smooth seas.

After each of these flights, I talked to the CO and XO about our 0-4 PPC and asked that something be done to correct his lack of common sense, aircrew coordination and headwork. The answer every time was, "We'll talk to him about it." There was never any improvement. Fortunately, our squadron was decommissioned after deployment, and because of some major personal problems, our infamous PPC was transferred out of the squadron and never flew a Navy aircraft again.

Senior officers in a squadron must pay attention to signs that something is amiss. Identifying a failing naval aviator is not easy. The signs of a problem can be subtle, and disaster can strike seemingly without warning. Failing naval aviators don't wear signs around their neck or have big, red warnings in their NATOPS jacket. The warning signs are there, however, and they were definitely there for this squadron CO and XO. The human-factors council failed to identify the many personal problems with which our PPC was dealing.

If we'd had a mishap, the CO and XO would not have had any excuse for their failure to ground this PPC, conduct a human-factors board and possibly a FNAEB. Human-factors boards are time-consuming and sometimes very emotional. No one likes to probe into the personal lives of friends and colleagues to get at the root of problems. Face it, it is hard to make the tough decision and ground a fellow aviator. However, that's why we are paid the big bucks, and the junior aviators below us and the chain of command above us expect us to make the tough calls.

To this day, I struggle with my part in this failure of leadership. My experience in nuclear submarines taught me to follow instructions and orders verbatim. Decisions were black and white. It took me some time to learn to stand up for my crew and myself and do what was right. To the JOs out there, learn from my mistake. Be forceful and stand up for what is right. To skippers and future skippers, pay attention to the signs that something is amiss. Pull that loose string—you may be unraveling a future death shroud. 

Cdr. Barton is the XO of NAS Pt. Mugu.

by Capt. Erik J. Jantzen

Three and a half months into a Westpac cruise in the lovely little sandbox known as Kuwait. Our home was Ali Al Salem Airfield, which brought back fond memories of those austere living conditions we learned at Combined Arms Exercises (CAX) at Twentynine Palms.

This time, I was up for my series of section-leader check rides. I had been a HAC for a while and was raring to get the section-lead qual. The day check was no sweat; the one at night got interesting.

I was to lead a section of CH-53Es to the KC-130 to practice low-light-level, NVG aerial refueling. Then, we'd descend and pick up a low-level TERF route that wove us in and around the scarce, navigable checkpoints strewn about Kuwait. Sounded simple enough, with the challenges being: 1) the aerial refueling, where the opportunity for a mishap (such as the 53's big rotary machetes chopping off the drogue or the probe) increases exponentially, and 2) picking up that all-important first checkpoint of a tough TERF route.

I was crewed with the best H2P in the squadron. We were Rocky 22, and our evaluator, Big Dog, was in Rocky 24. I trusted my copilot enough to fly right seat and do the plugging while I'd back him up with comforting distance and rate estimates from the basket and prepare us for the route.

We joined up with Raider 56, the tanker, and my copilot earned his keep by nailing the plugs. Big Dog's copilot in Dash 2 had a tougher go but still did well. At this point, I thought the flight would be a piece of cake.

After refueling at 2,000 feet AGL, we were to descend to 500 feet AGL, then eventually step down to 200 feet AGL and lower. The interim altitude was supposed

# Big Dog's Call Saved Us

to give us a better position for the first checkpoint, and more importantly, to give us a margin of error above a huge cluster of power lines with towers over 200 feet AGL. These towers lay directly between our tanker track and our nav route.

I thought I had briefed every conceivable problem without getting into anybody's cockpit. One question that arose later in the flight was when to make the seemingly basic switch from tanker to nav-common. This omission would come back to haunt me.

After kissing off Raider, we started our descent, with my copilot at the controls and me trying to find that all-important first checkpoint, a road intersection. It's a challenge shifting one's scan from an aircraft 10 feet away to a checkpoint many miles away, but we expected the difficulty. What we hadn't planned on was a giant flame burning from an oil well that lay right in line with our course toward that first CP. The billowing orange flame completely washed out our goggles and made it seem as though we were staring into a bright, green sun.

"Where is that damn intersection?" we both asked. It was crucial for us to get it dead on to pick up the route, but the de-gaining in the NVGs washed it out, too.


By this point, we were both trying hard to find the checkpoint when, out of nowhere it seemed, we heard Dash 2 call, "Altitude, altitude!"

We instantly checked our radalts and yanked the collective. The 53's engines churned out 13,000-shaft-horsepower worth of climb rate as we shot back up to 500 feet. A

sinking feeling then settled in the pit of my stomach as I realized the last thing my radalt showed was 200 feet. We were about to descend through 200 feet AGL and were right over the power-line farm...a farm we almost bought. The silence that followed was deafening. Big Dog confirmed we were on nav-common. We rogered and agreed to a new game plan with an "abbreviated" nav route that brought us back to base for some section bounces and debrief. Not exactly the way I'd planned ending my check flight.

What had happened to my seemingly straightforward check ride? Initially, I let my guard down because I knew I had a solid copilot, which was reinforced by his stellar performance at the tanker. Confidence degenerated to the extent that I had essentially taken myself out of the flying loop and went headlong into navigating during the descent. I then got boresighted on the first checkpoint of the route and let my copilot get sucked into the navigation problem as well. This left us with two navigators staring into washed-out NVGs and no aviators focusing on the instruments and truly flying the helicopter.

My over-confidence going into the flight also led me to assume the frequency change from tanker to TERF-common would be a no-brainer. It proved to be not so clear cut, and the ensuing confusion prevented my Dash 2 from alerting us sooner to our dangerous descent. As it was, Big Dog's altitude calls came out over guard, and not a second too soon.

For all that multipiloted aircraft communities espouse about crew coordination, we can't forget that it doesn't end with our own cockpit. A section or division's strength rests on a foundation of good crew coordination between aircraft. Putting it to work may just keep a wingman out of trouble, like it did for us. Thanks, Big Dog. 

*Capt. Jantzen is an instructor pilot with VT-2.*

The interim altitude was supposed to give us a better position for the first checkpoint, and more importantly, to give us a margin of error above a huge cluster of power lines with towers over 200 feet AGL.





# Tanking, Mediterranean Style

by Lt. Mike Garrick

**I**t was my first fleet hop, and I was headed into combat. I had just joined the Garudas, who were deployed to Aviano, Italy, in support of Operation Allied Force. We were on for a morning “kill box” mission. The plan was for two sections to fly to the tanker-track, gas up, and then orbit around Kosovo. The four- or five-hour mission meant we were sure to see the tanker more than once.

The XO, who was to be my lead, thoroughly briefed the flight. It looked like we were going to have a KC-135, although a British L-1011 was also noted on the tanker plan. I wasn't qualified behind the “Iron Maiden,” but I was sure this fact hadn't been overlooked. I reasoned that we only needed three Prowlers to complete the mission, so if I couldn't tank, it wouldn't mean NATO was going to lose the air war. I had talked to other pilots about the 135, both in Aviano and back at Whidbey, and the XO gave me some more parenthood on the subject when we broke up to brief the sections. I felt prepared and was confident it was going to be a good flight.

We launched on time. The rendezvous went remarkably well, considering I hadn't flown form in more than a month. We climbed to 20,000 feet, and I loosened up the section. The winds at altitude were light, so we didn't get the

tailwind we had hoped for. The trip down the Adriatic took a bit longer than expected.

At long last, we made radio contact with the tanker. I started to mentally switch myself back on for the joinup and tanking. Once we saw the KC-135, the XO made the rendezvous while I held on. We joined on the right side for a right-to-left (NATO rules) flow. The XO was cleared in first.

From my vantagepoint, the Maiden certainly looked manageable. I was next. ECMO 1 assured me that we had plenty of time to get on station, and we had the tanker all to ourselves. I stabilized in pre-contact and got the go-ahead to engage. I started my approach, trying to keep the closure under control. About halfway to the basket, I asked ECMO 1 how it looked.

“Good, keep it coming,” he replied. I had prepared myself for the possibility that I would have to take several stabs, so I was pleasantly surprised to see the probe engage the basket.

A split second later, my bubble burst when I saw the boom begin to disappear behind the glare shield. Knowing that, above all else, I didn't want to be high, I compensated down, and it was too much. I knew I was beginning to oscillate and heard, “Look at the big airplane,” from the right seat.





Photo composite by Allan Amen

Then I heard, "Back it off."

I pulled power and pushed the nose down to preserve the radome from the hose's imminent snapback. I also unconsciously banked to the right, to avoid the boom. We made it out of the basket, but the backseaters saw the tip of the probe pass over their heads on its way down to the Adriatic.

ECMO I called, "We're done," explaining what had happened. We were a couple hundred pounds over our bingo to Aviano, so we declined the tanker's request that we inspect the basket and started heading home. My SA balloon had completely deflated, and I had ceased to be an effective member of the crew. All I knew was that we were heading home, and it was because I hadn't been up to the task of tanking.

Fortunately for us all, ECMO I was thinking for me, because the winds had picked up and were in our face. We might have made it home, but it would have been close. He made the call, and we turned toward Brindisi, the closest divert. He asked for a straight-in approach to the field, and I did a less-than-perfect approach.

On deck we got some gas and did a walk-around of the jet. We didn't see it then, but the probe tip had hit the vertical stab when it fell off the aircraft. Our Prowler looked flyable, so

we decided to press back home. The breather had allowed me to clear my head, and the return flight was uneventful.

A couple points came out of this flight. First, the mission was accomplished. The squadron had been flying over Kosovo for a couple months already and had been there since the start of the air strikes. They knew they could flex to three Prowlers and still cover the vulnerability window. For my part, I was as prepared as possible for the Iron Maiden. It's just something that you have to experience to learn how to fly. We had had plenty of time at the tanker track, so I probably should have flown form behind the basket for a while to get a better feel for the sight picture. Doing so would have kept the tanker from disappearing over my head. It is a technique I tried on my next stab at the KC-135 over eastern Washington, and it helped.

Finally, after the incident, I should have kept my wits about me and concentrated on getting us home. We had moved quickly from one phase of flight into another, and I couldn't switch gears. Rather than contributing to the decision-making process, I had become a voice-actuated autopilot.

Lt. Garrick flies with VAQ-134.



# Spray-Gun Ray

by Lt. Bryan Dickerson

Anyone who has waved for any length of time has probably seen an aircraft recover with an emergency. As part of our training, LSOs, like pilots, are subjected to myriad simulated emergencies. Midway through cruise, I was a salty and, so far, successful CAG LSO. I thought I had seen about every type of emergency. No-flap Hornet? I knew the numbers by heart. Single-engine Hornet? Been there, done that. The week before, we talked down an S-3 with a completely delaminated (which is a fancy word for cracked) pilot's windshield and near-zero cockpit visibility. I was confident that I could handle whatever the air wing threw at me.

We were in CAG operations and had just finished debriefing the last recovery. The team leader and his LSOs were entering grades in the APARTS computer. I was semi-reclined, with one eye on CNN, one eye watching the respot on the PLAT, and one eye in the semi-rest mode. The phone rang, and the "04" on the display meant it was the Boss. I picked it up and with my cheeriest Jerry Mathers voice, I said, "Hi, Boss."

"Hey, you know what's going on with One Oh Four?"

"Uh, no sir, I'm clueless." An understatement.

"We're starting an emergency pull forward. He's coming back with a sick pilot."

Sick pilot? That's a new one. Wonder where the recovery bulletin for that is? I

looked at the PLAT and saw that the pull forward still had a ways to go, so I sent the team leader to set up the platform while I jogged down to air ops. The usual team of jolly guys was assembling, including CAG and the fighter XO. I stood in the back and watched. There was the usual discussion about divert availability, pilot proficiency and ability.

The pilot was on his first tour and had just joined the squadron a few weeks before cruise. Like 99 percent of Tomcat nuggets, he was a little colorful, but nothing too scary. I didn't think we would have too much trouble getting him aboard. When CAG gave me the "What do you think?" look, I told him I felt confident.

I made my way to the platform, trying to think ahead of the situation. My thought process was something like "I need to talk to him before he starts down the chute and tell him something original like 'Fly a good pass.' Sick? How could he get sick? What did he eat for dinner? I wondered what's for midrats. I wonder which ready room is having a good movie tonight.

OK, so maybe that "Brownshoes in Action Comix" is correct, I have an attention span slightly longer than the half-life of a Moochonium atom, but this is a routine landing, right? [Actually, a fighter pilot, according to BSIA's creator—call sign Mooch—has an attention span measured in

nanoseconds, but let's not get into that. -Ed.] Nothing wrong with the jet.

I got to the platform and assessed the situation. Nice night, good winds, not too dark, should be a piece of cake. I called them on the radio, and the RIO answered.

"Paddles, One Oh Four, Ray doesn't feel so good, but we think we can get it aboard." For the second time in my life, the warning bells that should have gone off didn't.

"OK, roger that. I think we'll be ready for you in a couple of minutes. Confirm you'll be max trap weight."

"That's affirm."

"OK, Ray, fly some good needles and get to a good start. Fly the ball all the way down, and don't try to make any plays for the deck." (Oh, thanks, paddles. First the socks, then the shoes! I used to hate it when paddles said that to me. Don't know why I said it.)

Deck's ready, lens is on. Time to make the doughnuts.

Ray flew some good needles down to a real nice start, then the fun began. On the transition to visual, he got overpowered and started to go high. I gave him a really nice "You're a little overpowered." Still higher, "Don't climb!" Too high to get aboard now. "Wave off, wave off, wave off!"

As he climbed away, I finally started to realize how hard a time he was having and how ill-prepared I was to help him.

Ever have the feeling you just let down a buddy who needed your help? I had it then. As I waited for 104 to make its way around the pattern, the hook spotter grabbed me and pointed to the Tomcat spotted just behind (actually just forward) of the LSO platform. The pilot was the other CAG paddles, and he signaled me to switch to button 18. I walked over and switched my radio.

"Gotta get in the cockpit with him, man.

He's really hurting. Fly the jet if you have to."

I just replied, "Roger," but I thought, "Hey, don't tell me how to..." Actually, he was right. If I had been more proactive on the first pass, we would be home free.

The second pass started the same as the first with good needles to a good start, but right away, he started to go high.

"Don't go high, you're overpowered."

More emphasis. "You're overpowered." LSOs all over the world were cringing, but he stayed high.

Then, it just slipped out. "Ray, pull off power now. Start the jet down!" And he did, nice and controlled. He worked himself off the high nicely and flew into a 2-wire. Another half a second up there, and I would have had to wave him off, admit defeat, and let them divert him.

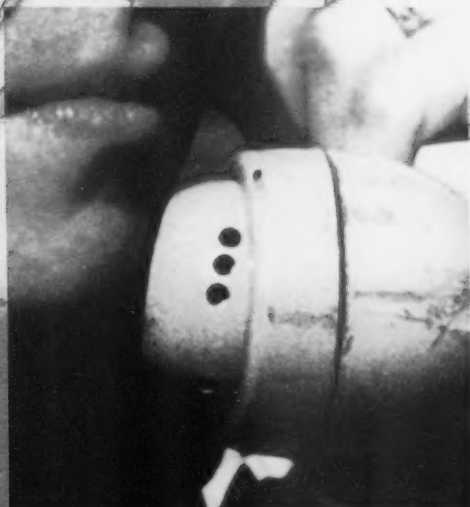
The boss wisely shut him down in the landing area and put a tractor on him right there. The PLAT was focused on the cockpit for the next four or five minutes, and the entire ship was treated to the vision of Ray depositing dinner in his helmet bag. Spray—his new call sign—did all the hard work, and it turns out he was in pretty bad shape. Thanks to me, he logged an extra 10 minutes of flight time.

Never underestimate an abnormal landing. Plan for all contingencies. Usually you will not be surprised.

Aircraft problems are usually predictable; pilot problems aren't.

Never go up to the platform feeling like you can handle anything without giving your best effort. You will quickly be humbled.

Lt. Dickerson flies E-2s with VAW-78. During his CVW LSO tour, he also flew Hornets.



U.S. Navy Photo by Lt. Larry Johnston  
Photo-composite by Allan Arman





# Spray-Gun Ray

by Lt. Bryan Dickerson

Anyone who has waved for any length of time has probably seen an aircraft recover with an emergency. As part of our training, LSOs, like pilots, are subjected to myriad simulated emergencies. Midway through cruise, I was a salty and, so far, successful CAG LSO. I thought I had seen about every type of emergency. No-flap Hornet? I knew the numbers by heart. Single-engine Hornet? Been there, done that. The week before, we talked down an S-3 with a completely delaminated (which is a fancy word for cracked) pilot's windshield and near-zero cockpit visibility. I was confident that I could handle whatever the air wing threw at me.

We were in CAG operations and had just finished debriefing the last recovery. The team leader and his LSOs were entering grades in the APARTS computer. I was semi-reclined, with one eye on CNN, one eye watching the respot on the PLAT, and one eye in the semi-rest mode. The phone rang, and the "04" on the display meant it was the Boss. I picked it up and with my cheeriest Jerry Mathers voice, I said, "Hi, Boss."

"Hey, you know what's going on with One Oh Four?"

"Uh, no sir, I'm clueless." An understatement.

"We're starting an emergency pull forward. He's coming back with a sick pilot."

Sick pilot? That's a new one. Wonder where the recovery bulletin for that is? I

looked at the PLAT and saw that the pull forward still had a ways to go, so I sent the team leader to set up the platform while I jogged down to air ops. The usual team of jolly guys was assembling, including CAG and the fighter XO. I stood in the back and watched. There was the usual discussion about divert availability, pilot proficiency and ability.

The pilot was on his first tour and had just joined the squadron a few weeks before cruise. Like 99 percent of Tomcat nuggets, he was a little colorful, but nothing too scary. I didn't think we would have too much trouble getting him aboard. When CAG gave me the "What do you think?" look, I told him I felt confident.

I made my way to the platform, trying to think ahead of the situation. My thought process was something like "I need to talk to him before he starts down the chute and tell him something original like 'Fly a good pass.' Sick? How could he get sick? What did he eat for dinner? I wondered what's for midrats. I wonder which ready room is having a good movie tonight.

OK, so maybe that "Brownshoes in Action Comix" is correct, I have an attention span slightly longer than the half-life of a Moochonium atom, but this is a routine landing, right? [Actually, a fighter pilot, according to BSIA's creator—call sign Mooch—has an attention span measured in

nanoseconds, but let's not get into that.-Ed.] Nothing wrong with the jet.

I got to the platform and assessed the situation. Nice night, good winds, not too dark, should be a piece of cake. I called them on the radio, and the RIO answered.

"Paddles, One Oh Four, Ray doesn't feel so good, but we think we can get it aboard." For the second time in my life, the warning bells that should have gone off didn't.

"OK, roger that. I think we'll be ready for you in a couple of minutes. Confirm you'll be max trap weight."

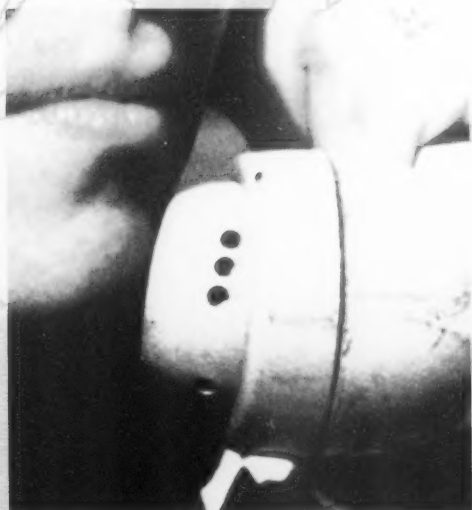
"That's affirm."

"OK, Ray, fly some good needles and get to a good start. Fly the ball all the way down, and don't try to make any plays for the deck." (Oh, thanks, paddles. First the socks, then the shoes! I used to hate it when paddles said that to me. Don't know why I said it.)

Deck's ready, lens is on. Time to make the doughnuts.

Ray flew some good needles down to a real nice start, then the fun began. On the transition to visual, he got overpowered and started to go high. I gave him a really nice "You're a little overpowered." Still higher, "Don't climb!" Too high to get aboard now. "Wave off, wave off, wave off!"

As he climbed away, I finally started to realize how hard a time he was having and how ill-prepared I was to help him.



U.S. Navy Photo by Lt Larry Johnston  
Photo-composite by Allen Amen

Ever have the feeling you just let down a buddy who needed your help? I had it then. As I waited for 104 to make its way around the pattern, the hook spotter grabbed me and pointed to the Tomcat spotted just behind (actually just forward) of the LSO platform. The pilot was the other CAG paddles, and he signaled me to switch to button 18. I walked over and switched my radio.

"Gotta get in the cockpit with him, man. He's really hurting. Fly the jet if you have to."

I just replied, "Roger," but I thought, "Hey, don't tell me how to..." Actually, he was right. If I had been more proactive on the first pass, we would be home free.

The second pass started the same as the first with good needles to a good start, but right away, he started to go high.

"Don't go high, you're overpowered."


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# The Hidden Danger

by LCdr. Glen K. Hansen

was scheduled for an NVG flight with an instructor pilot. We discussed the hazards of low-altitude NVG navigation, then briefed the hazards in the high-altitude bombing pattern. Following the brief, we talked about hidden hazards of low-altitude flight over Florida. That discussion took me back four years to a low-altitude, NVG-navigation flight in northern Nevada—a flight that constantly reminds me how quickly the dangers of naval aviation can appear and disappear.

I was assigned to Naval Strike Warfare Center and dual-qualified in the A-6 (primary) and the FA-18. We were flying an A-6 on an NVG currency mission, encompassing a low-level and bombing in the B-17 work area. The moon was about 50 percent, 120 degrees azimuth and 60 degrees elevation. It was a beautiful moon for the mission.

Besides the proficiency portion of the mission, we were evaluating a low-light upgrade to the system and were collecting data points in an evaluation of NVGs as a targeting source. I started out wearing the upgraded goggles and my BN would wear the standard NVGs. Sometime during the flight, we would climb to high altitude and trade goggles.

We launched out of Fallon and headed north to B-20. We planned on descending to low altitude in B-20, heading east over the mountains until we reached Edwards Valley, turning south and proceeding south-southwest until we reached Sperm Lake. We would then climb and head into B-17 for high-altitude target recognition and bombing. The terrain was extremely challenging, and we would rely on the A-6's low-altitude, terrain-clearance capabilities (TC).

We descended into B-20, checked the radar and TC and turned east at 800 feet AGL. My BN found a valley, and I turned the aircraft to run straight into it. The mountain range started rising, and I began a gentle climb to clear the mountains shown on my display.

The SRTC system in the A-6 was vulnerable to small mountains hiding in front of large mountains. The radar could not distinguish where the small mountain ended and the large mountain began. The crews overcame this by studying the chart thoroughly and planning the route to avoid this phenomenon.

We had studied the chart and planned our route carefully, but we were surprised this night. I had the aircraft in a gentle climb, using both the TC and NVGs to get a feel for the terrain. Suddenly, the radalt went off; I had it set at 450 feet. The instinctive reaction is to add power, start climbing and then evaluate the displays. As I got the nose 20 degrees above the horizon, my TC display started showing the distortion between the near mountain and the far one and proved that we were seeing and flying off the far mountain.

The radalt continued to sound off, and I looked left to see the mountain peak going below my left wing. There was a little snow on top that shined in the moonlight. The radalt bottomed out near 200 feet, a bit low for my comfort level. I continued to climb to 10,000 feet and set the autopilot.

You should be asking how I could get this close to a mountain while wearing NVGs. The obvious answer was outside the cockpit. Remember the moon elevation, azimuth, and brightness? Heading east toward this moon was like flying directly into the sun on a late-afternoon low-level. The new goggles were



# ers of Mountains

**We had studied  
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better in low-light conditions, but just like the original Catseyes, they gained down with too much light. I was getting very little help from the goggles, and they were likely hurting my scan as they took time away from studying the TC display. The goggles only helped as I was pulling away.

We reevaluated continuing the flight and, as a crew, completed the evaluation with our minimum altitude set above 1,000 feet AGL. We finished the bombing and returned to Fallon for a short debrief. There wasn't much we could say to each other. We both knew how close we had come to planting ourselves in the side of a mountain. I spent a good deal of time evaluating my capabilities and priorities.

I have not flown a NVG low-level in several years while tactics have developed. I have maintained a set of priorities whenever I fly with goggles.

No matter how good or well-trained an aviator is, he can become overloaded. We need to continually evaluate our own ability to cope and determine how much crosscheck time is available. It was obvious I was task-

saturated, and my scan broke down. Keep the scan going and climb to cope if necessary.

NVG flights require a better personal evaluation. Am I capable of completing the flight? Can I successfully complete the flight with NVGs? If not, don't fly with the goggles. By the way, the new AN/AVS-9 goggles also require aligning the tube, focusing, and evaluation using the ANV-20/20 infinity focusing box before each flight.

I fly with the NVGs to improve SA, but if they degrade SA by taking too much time away from other displays, stop using them until they are again useful. It is also important to remember which tool is going to provide the best SA in any given situation. If it is not the goggles, don't hesitate to transition to something else. We are often fascinated by the visual clarity provided by goggles, but they may be clouding our SA.

Bottom line is never use NVGs if they will distract from the mission. I counted on them to keep me out of trouble and failed to use the other tools at my disposal.

LCdr. Hansen flies with VFA-87.



# NEARLY A LAT TOO LONG

by Lt. Ryan Caldwell

It was another scorcher in El Sweato. We were in the second week of our FRS strike det, and things were going well. I was scheduled for a fun hop that day, a low-altitude training flight (LAT). I was looking forward to this hop because it provided a nice break from the standard circle-the-wagons bombing hop. It would also get me one "X" closer to being finished with the strike syllabus before we went back home to Cecil.

The brief went as scheduled. My chase IP covered all aspects of the flight, including a review of LAT training guidelines. It was time to walk, and we suited up and headed for maintenance control.

"Three Three Seven, please," I said as I got to the desk. I began looking through the book to see what problems had plagued my jet recently. I thumbed through one or two MAFs and then read one that caught my attention. It read: "A/C rolls right under 5 G's with FCS aural caution. No BLINS or X's showed up. FCS caution on MDI. Reset OK. Occurred twice under same conditions."

I was concerned, so I marked it with my finger and continued through the rest of the book. Finding no other MAFs that bothered me, I flipped back to the one I had marked. I certainly did not want to have a flight-control problem at 200 feet above the ground. I asked the chief behind the desk what he knew about the problem. As it happened, the person who had worked on the problem was standing there and answered up. He told me they tried every way they knew (in the way of test groups and maintenance bits) to "break" the jet and repeat

the gripe, but couldn't. (The previous pilot had actually downed the jet, but maintenance brought it back up because they could not repeat the gripe on deck.)

"Just stray trons," I said. To which he replied, "Yes, sir, probably."


Satisfied with his explanation, I signed the book and manned up. We proceeded to our assigned area without delay and began our initial G warmup.

"Ninety right, go...ninety left, go," then I heard the familiar "deedle." I looked down to find an FCS caution with no X's or BLIN codes. After some discussion, I reset the caution and we tried it again.

"Ninety right, go...ninety left, go," and once again, "deedle, deedle," with the same problem. More discussion, and another reset.

One more time, "Ninety right, go...ninety left, go," and finally success, no problems. Down to low altitude now. After several LAT warmups, my chase IP told me to do a SCAT maneuver. I rolled the jet to the left and applied the required G. I soon heard, "Deedle, deedle," and quickly glanced down at the left DDI to see an FCS caution. I immediately tried to stop the maneuver by placing the stick right to roll wings level, but the aircraft did not respond. It kept rolling left, now reaching about 120 to 135 degrees AOB. By this time, the stick was full right, and the aircraft was still not responding.

For a split second, I thought about the ejection handle, but in that same second, I figured I was probably out of the



envelope. I stood on the right rudder, and the plane reluctantly rolled wings level at approximately 100 feet AGL (my chase IP's estimate).

I began a quick climb to a safe altitude and got out a "knock-it-off." Pulling up the FCS page, I looked for the tell-tale X's and BLINs, but there were none. I thought quickly back to what I had read in the book. After talking with my chase, I reset the flight controls and headed back for an uneventful straight-in. I was OK, but a little shaken. My adrenaline was definitely flowing when I got out of the plane.

What happened? Upon further inspection, maintenance found that the HDU (hydraulic drive unit) was going bad and causing problems with the leading-edge flap system. The leading-edge flaps (LEFs) were not programming correctly because of improper hydraulic pressure in the HDU.

In the Hornet, if the commanded and actual positions differ more than 3 degrees, a brake locks the LEF in response to the out-of-tolerance condition. This is what they think happened to my Hornet.


We can learn a few lessons from this incident. Let's start with my decision to sign for the aircraft. Should I have taken the jet? It is hard to say. Perhaps I should have asked my IP what he thought about the gripe? He certainly had more experience than I did and could have helped me make the decision to go. As we all learned in primary though, you can't let someone else tell you a plane is good when you believe otherwise.

The ultimate decision to take it flying remains with the person signing for it. If the aircraft is not 100 percent up, don't take it. Many times we may take a marginal bird due to perceived, and sometimes, actual pressure to get an "X" or complete a sortie. In the training environment, it is not worth it. As my current CO says, "Short of combat, nothing we do is worth dying for."

A second learning point can be found during the G-warm maneuver. There are those who believe this exercise is a waste of time and that we should not do it. I contend that it is a valuable assessment tool for both the pilot and the aircraft. The G-warmup is the place that the aircraft is stressed for the first time in the flight. More often than not, if a problem occurs, there it will probably recur under other high-stress flight conditions; think of it as the aircraft trying to tell you something is wrong. Maybe if I had listened to the plane, I could have prevented this near-mishap.

Lastly, think about ORM and discuss it in the brief. At the time, we did not use ORM, nor did I know much about it. Had I known what I know now, I would probably have been able to break the mishap chain a little earlier.

LAT flights are important and should always be part of a carrier aviator's repertoire. Aircraft malfunctions in the LAT environment—or anywhere for that matter—can be serious. We can't prevent every malfunction. The best defense is knowing what to do when something does happen, and our training does a great job with that.

One final note, especially for all centerline-thrust pilots. We sometimes forget that the rudder is actually attached to the plane and is still a control surface. Don't forget about it, and don't be afraid to use your feet to keep flying. 

Lt. Caldwell flies with VFA-81.

# Tell Me a Story



by LCdr. Dennis Mikeska

**H**ave you ever heard a story at an APM or safety stand-down starring a pilot with nerves of steel, who was cool as ice, with a memory like a steel trap, who recovers a plane from a seemingly hopeless situation? Of course you have, and it's likely you remember it because something in the story might save your life some day. At least it makes for a good story later. The yarns that have the greatest effect are those that seem heroic or just plain cool.

One story had that effect on me. It described the recovery of a near-supersonic TA-4J from a steep dive in which the pitch control did not work. With more than 45 degrees nose-down, racing through 10,000 feet AGL at 0.95 Mach, the pilot recovered by applying full nose-up trim. Apparently, a shock wave over the elevator made it ineffective for pitch control. So, as the pilot moved the stick back and forth, nothing happened. However, when he applied nose-up trim, the entire horizontal stabilizer moved. Since only the elevator portion of the stabilator was in the shock wave, he regained pitch control.

What was going through the pilot's mind? Maybe, while passing 10,000 feet, he was thinking, "If I can't recover this jet soon, like in the next two seconds, I'm screwed! Because, if I eject at this speed, I'll be a rag doll. And if I don't eject, I'll be a smokin' hole. What can I do?"

Then something happened, a nervous twitch, a conscious thought, or something made him try the trim button, and, presto, the airplane responded and recovered.

I think many of these in-extremis stories, at least those with a good ending, have something in common. The pilot's actions under duress, time compression, and disorientation may be governed in large part by previous, vicarious experiences.

Look at NATOPS, for example. We learn boldface-emergency procedures to build habit patterns and reflexes for unlikely future events. We memorize the lessons that were written in blood so when things go wrong, we flawlessly follow procedures. Unfortunately, many emergencies and circumstances aren't covered by NATOPS. This is why safety stand-downs, APMs, and discussions are important, because they may provide something NATOPS or SOP can't: A way to save your life during an unusual emergency.

Back to the Skyhawk dive-recovery story. About two years after I heard that story, something similar happened to me. I was in the FA-18 FRS and about to finish the air-to-ground syllabus. The flight schedule had me leading the skipper on a low-altitude, section-tactics hop. The FA-18s would be loaded with heavy inert ordnance, and the weapons-delivery profile would be low-altitude pops to low-angle dive deliveries.

Because it was the FRS, we could fly either a single-seat FA-18 or a two-seat FA-18B on any given hop. For this hop, the CO got the "straight" and I the "two-holer." Everything went silky smooth on this hop from the brief to the target area. It wasn't until my jet was pointed 15 degrees nose down, 500 knots, passing 900 feet AGL on my first dive that I realized something was wrong. My flight controls were jammed! I couldn't pull back on the stick, and the clock was unwinding.

I applied nose-up trim, and the jet recovered just below 500 feet. After following the procedures for jammed flight controls, I made an uneventful short-field arrestment. On shutdown, we discovered what caused the jammed flight controls. Apparently, during the pop-maneuver before the dive, my navbag had floated from the front cockpit all the way to the back and lodged itself between the aft stick and seat. It was jammed in such a way that backward stick movement was extremely limited. I consider myself very fortunate today, first for having heard the Skyhawk dive-recovery story, which gave me the idea on how to recover, and second, for being alive to talk about it.

One note: Loose items in the cockpit are killers, and my loose bag nearly got me. Story-telling helped save my life. ✈

LCdr. Mikeska flies with VFA-27.



by Ltjg. Loren Romeus

Our business was hauling cargo, and business was good, supporting the numerous operations spawned by the Kosovo crisis. The Adriatic and Ionian Seas swarmed with ships clamoring for passengers, mail, and cargo, and we were more than happy to oblige. Our detachment of two MH-53Es was making hits out of Bari, Italy, to several ships off the coast of Albania just about every day. So far, this day was no different. We had dropped off a full load of cargo and were heading back to the beach empty except for a few passengers.

The HAC had the controls in the left seat, so I mustered the courage to sample one of the box lunches scalped from the combat-cargo guys on the boat. Out of habit, I scanned the gauges thoroughly before diverting my attention to a non-flying task for a few minutes. Hmmm, 500 feet, 150 knots, about 40 miles to go, all gauges normal. One of our passengers, a reserve commander and former P-3 pilot, hopped up in the jump seat between the pilots. He wasn't on ICS, so conversation was limited to pointing, nodding and the universal hand signals that all pilots pick up along the way to relate their best "there I was" stories.

Just as I popped open a can of grape juice, a strong yaw kick jolted the airframe. I can't think of any situation in any aircraft where an uncommanded yaw kick is a good thing, but in a helo with a tail rotor over open water, it is bad juju. The commander must have thought so, too, because he came off the jump seat like a scalded cat, scampered across the cabin, and was strapping in before anyone else could move a muscle. Somebody might have said, "Whoa, what was that?" over the ICS, but it wasn't really necessary; the helicopter suddenly had our undivided attention.

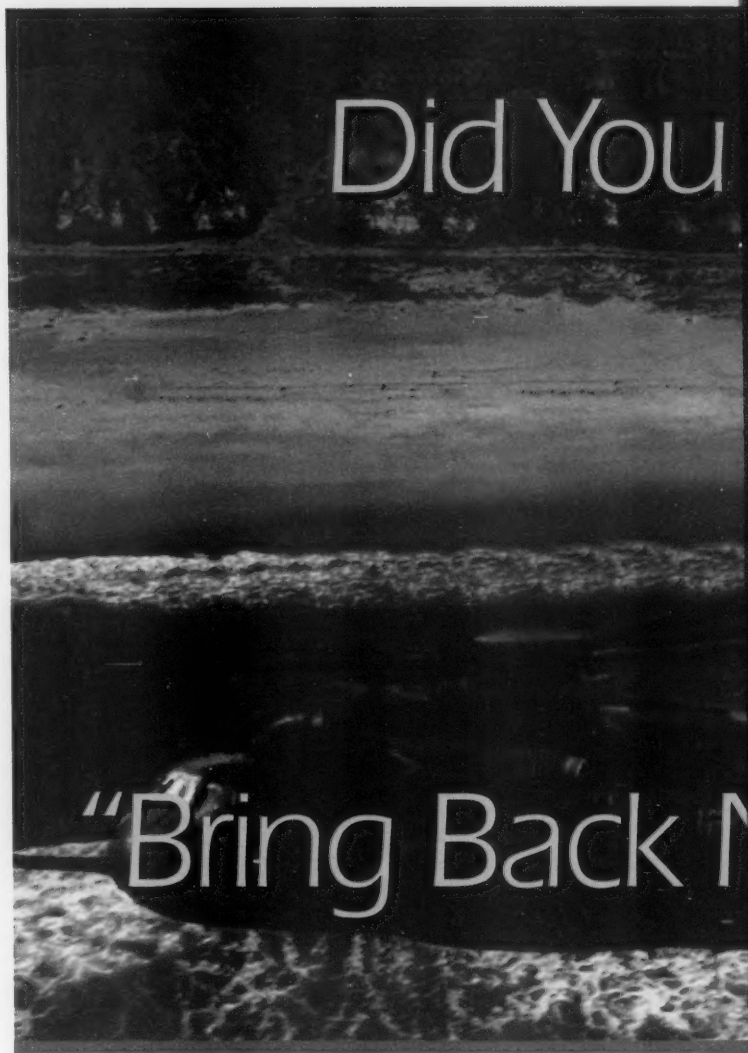
Still holding my juice, I checked the gauges. The engine torques were erratic, but which one was the problem? One of the two aircrewmen was leaning over the jump seat giving another pair of eyes. I knew that communication was critical

in an emergency situation, but since I wasn't making any sense out of what I was seeing, I had nothing to say.

"Bring back number three," the HAC said suddenly. My eyes snapped to the No. 3 engine instruments and I thought, "He must be wrong, number three is still pulling strong." I set down my juice and reached for the No. 3 speed-control lever but didn't move it.

We had briefed that we would get dual concurrence before securing an engine, and at this point I did not concur. I was about to voice my concern when the HAC called, this time more forcefully, "Bring back the number three engine!"

I hesitated. All three engines were running, albeit erratically. I saw no reason to secure any of them, but obviously something was wrong. I decided to trust the





Say,

Lumber Three?"

superior knowledge and experience of my HAC and assume he had seen something I had not, so I slid the No. 3 engine back to ground idle. Almost immediately, the ICS squawked again as he said frantically, "Bring it back up!" It was obvious he was frustrated and fighting to remain calm.

I quickly complied, still wondering what I had missed when the ICS went quiet, and the entire instrument panel and center console dropped dead. Total electrical failure.

The MH-53E NATOPS warns, "Helicopter response to a total electrical loss may be violent." It wasn't kidding. The pilot had his hands full as both AFCS computers kicked offline, and the helicopter sloshed around and started descending, narrowing that precious gap between us and the water below.

"We're going swimming," I thought as I reached up and began cycling the generator switches. Long, anxious, lonely seconds ticked by. Unable to communicate with each other and not knowing what exactly had happened, we found ourselves separated and fighting an enemy we couldn't identify.

A few lights came back on, and a few gauges spun up on the instrument panel. I kept working the switches until I had all three generators back on-line. A familiar, low static started buzzing again in my helmet, assuring me the ICS was back up. Things didn't seem quite right, though, so I tapped my foot switch and ventured, "Hey, it looks like we still don't have DC power."

"Check the circuit breakers," the HAC replied.

"I'm already on it. Rectifier circuit breakers are popped. Resetting," came the word from the back, accompanied by all the right lights and gauges.

Checking the center console, I reactivated the AFCS computers, turned on AFCS and trim, and armed the servos. Deep breath. "OK," I thought, "let's take stock of the situation." The HAC had stopped the descent during the electrical failure and had climbed to get us away from the water. We were now climbing through 1,000 feet at about 100 knots, and all the engine instruments had settled down. We seemed to be out of the forest for the moment. However, the No. 1 engine was now running at below ground idle with the speed control nearly full forward. Very odd.

About 30 seconds later, the engine surged back to 100 percent by itself and resumed normal operations.

We headed straight for land and followed the coast back up to Bari (a tense half hour, I can assure you), and

**The pilot had his hands full as both AFCS computers kicked offline, and the helicopter sloshed around and started descending, narrowing that precious gap between us and the water below.**

returned to terra firma without incident. There were considerable speculation and discussion among the crew, but none of us could formulate any reasonable explanation of what had gone wrong. Once back on the deck with all of our passengers offloaded and after consulting with QA, we brought each engine back to idle individually and ran it back up to 100 percent. They all worked fine. We then shut them down and restarted them. They all worked fine.

With no answers presenting themselves and questions piling up fast, we just shut down and reinspected everything visually. It took only a few minutes to find the culprit: a compressor blade in the No. 1 engine had detached and gone back through the rest of the engine, wreaking havoc along the way.


After clapping each other on the back and rejoicing that we had avoided testing the value of our underwater-egress training, we all sat down and went over what we remembered. Evidently, the load-sharing configuration of the engines caused the other two engines to cycle when the No. 1 engine started acting up. The HAC explained that when all the engines were cycling erratically, he had noticed the No. 3 engine exceeding its turbine-temperature limitations so he wanted me to nudge it back a hair, not yank it back to idle. That explained a few things. Unfortunately, that was about the only question that was successfully answered.

I may never know what made that compressor blade fail, the damaged engine run at idle for a while then reengage, the

electrical failure occur, or the reserve commander move so quickly. However, I did learn some valuable things about dealing with emergencies.

First, not everything falls in the category of a documented NATOPS emergency with a cut-and-dried emergency procedure. The better you know your aircraft and its systems, the better equipped you will be to deal with those odd emergencies.

Also, communication in an emergency must be clear and concise. My misunderstanding of the HAC's command to "Bring back number three" was nearly catastrophic. It never even occurred to me that he meant anything, other than pulling an engine all the way back to idle. There isn't time to question, double check, and clarify things during an emergency. That's where the NATOPS brief comes in. Even though our NATOPS brief had not addressed our specific incident, it governed our actions in a tight situation and just may have saved our lives. Each crew member did what he was supposed to quickly and efficiently without having to be told. The crew chief stepped up to the jump seat to back up the pilots on the gauges and have access to the circuit-breaker panels.

The second crewman quickly checked the engines for visible damage and staged the raft in preparation for evacuation. Most importantly, the NATOPS brief also prevented our communication problem from making a bad situation worse. We had briefed that besides getting dual confirmation, we would pause the engine in idle before completely shutting it off, allowing us to reconfirm that we wanted to secure it. That pause in idle kept us from securing a good engine while the bad engine was chewing itself up. 

Ltjg. Romeus flies with HC-4.



I briefed my predicament regarding my pen to my copilot, and we decided to land. After touchdown, I realized we might be pressing too hard. I pitched the idea of calling quits to the crew, and they agreed.

This story obviously reinforces the idea of securing personal items like pens, glasses, and flashlights so that they do not FOD the cockpit. But that is not why I wrote this article. This tale raises two important issues.

First, when is it time to say when? There is always some pressure on every flight. When you launch, someone, somewhere has expectations: increasing night hours, putting bombs on target, or using OPTAR. As aircraft commanders, mission commanders, or section leaders, we are obliged to meet those expectations by accomplishing the mission. However, we are also obligated to exercise mature, sound judgement, to make the hard decision to throw in the towel when the risks outweigh the gains. The challenge is to recognize that dilemma when it occurs, make the right decision, and then accept the consequences.


I thought that the operations officer would give me grief about cutting a night event short but

he never said a word. In fact, no one said anything negative at all.

Second, can you recognize a degrading situation? Sometimes it's easy. Other times, it isn't. I remember the story of the boiled frogs. A frog placed in a pot of boiling water will surely try to jump out of that pot. A frog in cool water that is gradually brought to a boil will remain in the pot oblivious to the hazard that engulfs him. Those subtle degradations can get you into trouble.

I had experienced poor weather, a mission change, a minor electrical problem, cockpit FOD, and a brief loss of situational awareness. None of those conditions are unique or exotic. They have happened to many others but in this situation, I decided that enough was enough.

Was my situation all that bad? Individually, those challenges do not make for a bad situation. However, when they are considered collectively, it is easy to say yes, it was a bad situation.

Was I headed for a mishap? I can't say—events that did not occur cannot be discussed with any certainty. I can certainly say that we landed without incident. We, unlike the frog, bailed out before the water got too warm. 

LCdr. Grady is the OinC for HSL-51's Det 6.

# On Cat 1

## Coming Attractions for April

- SAR Helos in the Storm
- The Red Badge of Discouragement
- My Vibrating Approach

Cdr. David Baranek, USN (Ret.)



# BROWNSHOES IN ACTION COMIX

"The kind real aviators like"

by Cdr. Ward Carroll

The skipper...The skipper?  
I won! I won! In your face!  
CAG was wrong! I'm a winner!

That's a lot of  
bike, skipper.

Stand clear, master chief.  
I'm headed down that  
highway winners travel...

Good thing he  
had his helmet  
on...

Skipper, can we  
fall out now?

# CRASH!

It's time to pull the name of our  
fund-drive raffle winner. Whoever's name is on  
the ticket I will draw will win this brand-new  
motorcycle. And our winner is...

